

mission, as is proved by the numerous cases occurring among nurses and doctors in hospitals. In the Spanish-American war this method of transmission seemed to bear a very important part. Certain small epidemics have also been due to infected oysters, but they probably play no part in the San Francisco cases.

In San Francisco, after April 18th, the conditions were such that we could hardly hope for the good fortune to escape an invasion of typhoid fever. The city at a moment's notice lost the use of flushing closets and had to be without them for a month. During another period extending to the present, a large proportion of the population have had to continue as in the first period, using latrines. Owing presumably to the lack of funds many of these latrines were for a long time improperly constructed and not a few still remain so and the spasmodic dusting with chloride of lime or sprinkling with carbolic acid could hardly do more than transiently substitute one disagreeable odor for another somewhat less so.

#### SUGGESTIONS.

Constant watch must be kept on our water supply because although not infected it might readily become so. Every latrine in the city must be hunted up, and if it is not properly built it must be made so. The burned district should be thoroughly gone over and ample toilet facilities provided in every block where men are working. When possible flush closets should be built; when this is impracticable a screened latrine with double spring doors should be used. Under the seat should be placed a galvanized iron container holding a solution of cheap disinfectant, such as lime. This container should be emptied daily.

If it is impossible to arrange a system for emptying the pails, a portable screened double-doored latrine should be placed over sewer manholes, or over earth holes, at least 6 feet deep and not more than two feet wide in its narrowest diameter in order that its depth and darkness will bar out the flies. When the sewer manhole is used it should be daily cleaned and flushed with a stream from a fire-hose. When an earth hole is used a box of dry earth should be at hand and directions posted to cover every stool therewith. The fecal mass should be thoroughly covered by a laborer once a day. When the latrine fills to within four feet of the surface it should be filled in and a new one dug. The covering of the fecal mass every day or so with chloride of lime or crude carbolic acid is of but little value, since flies will attack the first stool deposited after treatment with either of the substances. It certainly cannot be expected that they disinfect the mass on which they are placed. If this were desired it would be necessary to thoroughly mix the disinfectant and feces in proper proportion. To prevent flies lighting on feces they must be immersed in a disinfecting solution and when containers are used the only safe system is to use both screens and solution.

The inspection of latrines could be done by the

police, and it would take but a few responsible medical inspectors to instruct and watch the police.

During the prevalence of typhoid in a community, the people should be urged to eat no uncooked food, that is liable to be infected by flies or dust. Physicians should be on the lookout for ambulatory cases, and these should be immediately put to bed and properly handled.

Those handling typhoid patients should be taught that the feces and urine and sometimes sputum contain the bacillus and are consequently a source of danger. Early recognition of cases is of the utmost importance and suspected cases should be considered typhoid until proven otherwise. Typhoid patients should not be kept in the same room or ward with patients suffering from other diseases, and the apartment in which they are located should be carefully protected from flies. Every discharge of feces or urine should be thoroughly disinfected. The sputum should be destroyed. Eating and drinking utensils, bedding, towels, gowns, etc., should be all soaked in a disinfecting solution a sufficient length of time before removal from the ward. The attendant should wear gowns which are removed before leaving the ward and the nurse when handling the patient should wear gloves.

#### THE MANAGEMENT OF PLACENTA PREVIA, WITH A REPORT OF SEVEN CASES.\*

By A. B. SPALDING, M. D., San Francisco.

Placenta previa is not such a rare obstetrical complication but any physician in general practice of medicine may at any hour be suddenly and most unexpectedly called upon to manage this dramatic obstetrical crisis. To know that one is dealing with a condition so liable to end fatally to both mother and child; to know that by modern methods of management more mothers at least can be saved than by the older methods; to know that spectacular but ineffectual efforts are constantly being made to lower the high foetal mortality, gives much material for thought and conjecture.

Holmes<sup>1</sup> sums up the maternal and foetal mortality in placenta previa in 2756 cases, reported in the literature since 1877, and compares the results with the statistics of Read & Muller for the mortality in 1975 cases occurring in the pre-antiseptic days, as follows:

Holmes Cases.	Maternal Mortality.	Foetal Mortality.
Complete .....	13.4 %	80.5%
Incomplete .....	4.3 %	50.5%
Total .....	7.36%	54.1%
Read & Muller Cases.		
Complete .....	30.9 %	67.5%
Incomplete .....	15.0 %	51.5%
Total .....	23.6 %	63.1%

So many of these patients give a clear history of

\* Read at the Thirty-seventh Annual Meeting of the State Society, Del Monte, April, 1907.

having suffered from endometritis or subinvolution of the genital organs that valuable prophylactic measures should be carried out by every practitioner with all puerperal patients under his care. The proper management of the normal puerperium is in itself such an extensive subject that time will not permit of its complete consideration. Of the more important points in the prophylaxis of placenta previa, mention is made of careful repair of the genital tract after labor, of a prolonged period of rest during the puerperium, which should be combined with intelligent massage<sup>2</sup> and proper posture, of local and internal medication when indicated and of proper operative effort when needed to prevent the development or to cure sub-involution, retroversion and endometritis before the patient passes to a second and possibly complicated pregnancy.

Hemorrhage is certainly the most obvious, the most various, the most dangerous diagnostic and prognostic sign to be noted. When it appears early in pregnancy, as it sometimes does, it usually appears at what seems to be a menstrual period, it usually indicates a serious condition, such as a complete placenta previa. It is usually mistaken for threatened abortion, and fortunately it not infrequently ends in a spontaneous expulsion of the uterine contents. With recurring hemorrhage early in pregnancy the patient is always a source of worry, although fatal hemorrhages are unusual. The foetal prognosis is so poor that in the interests of the mother, pregnancy should be terminated as soon as a positive diagnosis is made. An important point which should always be born in mind when caring for patients with either placenta previa or threatened abortion, who bleed freely and for a considerable time, is to make frequent blood examinations. I have seen one patient in consultation with a similar history whose hæmoglobin had dropped to 30%. When the hemorrhage begins in the middle months attention must be paid to the child, although never to the extent of sacrificing the mother's life. Trained attendants should always be near the patient and an impressive warning should be given to call the attendant at the beginning of hemorrhage. Women are so used to losing blood per vaginam that failure to call aid promptly is greatly to be feared. When possible the patient should be carried along until at least the thirty-second week. Should interference be demanded, operative judgment should be influenced by the condition of the child, the variety of the previa, the condition of the cervix, the size of the passages and the surroundings of the patient. With a complete placenta previa, a live, vigorous child in a uterus with a long closed cervix, with a small vagina or a small pelvis, with the mother in good condition and in a well regulated hospital, Cæsarian section should be considered.<sup>3</sup> Statistics are against this operation,<sup>4</sup> but in looking over the reported cases and eliminating those where the mother was in poor condition or infected before operation and where the baby was dead, it is found that the foetal mortality is markedly lowered by this operation,<sup>5</sup> with about the same maternal mortality that

is found in similar cases treated by other methods. That is about 20% maternal mortality. The usual method of procedure in these cases is to partially dilate the cervix either with a rubber bag or with gauze packing, performing version as soon as feasible and extracting slowly. The foetal mortality is very high; the maternal mortality depends on the variety of the previa and the degree of asepsis of the operation. With a central variety or with any slips in aseptic technic the maternal mortality will be about 20%.

Near term the management of patients with placenta previa should be prompt and operations performed which will tend to conserve the life of the child as well as that of the mother. The usual errors in the management of these patients are that the child is allowed to die in utero before operation is attempted or that extraction is attempted before there is sufficient dilatation of the cervix, with the result that the child dies, or even worse, the mother dies from rupture of the uterus. Accurate diagnosis of the variety of the previa and of the location of the cord is needed. This is at times a very dangerous procedure. I once saw a case in hospital practice where such a profuse hemorrhage followed an examination in the clinic room that the patient's life was despaired of before she could be transferred to an adjoining operating room and delivered.

To control the hemorrhage packing the cervix with gauze is the usual procedure when a live child is desired, although just as good results can be more easily attained by inserting a Voorhees bag. To control the hemorrhage, it is not necessary to force the bag through the placenta, but to insert it just inside the internal os. The Braxton-Hicks method is by far the safest method as far as the mother is concerned, but it adds to the foetal mortality. With the hemorrhage under control the cervix must be dilated either with the body of the child or with some other form of cervical dilator. I have found the rubber bags most efficient. After dilatation of the cervix the child can be extracted, usually quite easily with either forceps or by version. A point here of diagnostic and prognostic importance is to locate the cord. If it is inserted low, that is attached to the part of the placenta overlying the cervix, extraction should be more rapid than if the insertion is higher up.

With lateral placenta previa, many patients can deliver themselves safely with more or less hemorrhage and when interference is needed rupture of the membranes or the application of forceps will usually suffice. It is hardly necessary to add that nearly every patient needs energetic treatment for shock and hemorrhage and that exceeding care must be taken to avoid sepsis.

The following list of cases illustrate many of the points mentioned above:

Case 1. Mrs. S., age 28, two para. Referred by Dr. Lewitt. Labor expected September 15th, 1903. I saw the patient first about three a. m. on August 21st. She had just had a profuse hemorrhage which had started during sleep, had saturated the bed and half filled the vessel under the

bed. She was suffering with acute anæmia and complained of air hunger, thirst, etc. No nurse had been called. She stated that during the pregnancy the hemorrhages began at the second month and had returned each month, compelling her to remain in bed each time for several days. Previous labor normal. No pelvic or menstrual trouble. After removing a large number of clots from the vagina, examination revealed a soft cervix dilated one finger, a central placenta previa with vertex overlying in L. O. A. position. Child was alive. Hemorrhage was easily controlled with gauze packing in cervix. Shock and hemorrhage were combated with stimulants and salt solution per rectum and patient removed to the Childrens' Hospital. At four-thirty p. m. gauze was removed. Cervix fully dilated, covered by placenta. Hemorrhage very profuse. Cervix was torn through and internal podalic version performed. Cord prolapsed, but by extracting immediately a deeply asphyxiated male infant weighing five pounds and thirteen ounces was delivered. Hemorrhage was alarming and placenta adherent. After removing placenta manually and packing uterus and vagina tightly patient improved rapidly. On the fifth day her hæmoglobin was 55% and red cells 2,900,000. No rise in temperature and complete recovery for mother and child. Placenta normal in size and shape.

Case 2. Mrs. T. K. Age 29. Five para. Consultation with Dr. McKay. I saw patient first about four-thirty p. m., June 21st, 1904. She had had two miscarriages, but otherwise gave a negative pelvic, menstrual and obstetrical history. She was about seven months pregnant and had had no discharge of blood until the present day. About noon-time she suffered with slight back ache and cramps, which was soon followed by a profuse discharge of blood. Dr. McKay gave the patient a dram of ergot and packed the vagina with cotton saturated with a solution of alum. On examination I could find no evidences of foetal life. Position L. O. A. Uterus firmly contracted, cervix dilated three fingers, completely covered by placenta. Hemorrhage had ceased. Under chloroform cervix was rapidly dilated, placenta separated, punctured and a bi-polar version performed. A seven months' stillborn infant slowly extracted. Placenta followed the child and hemorrhage stopped spontaneously. Recovery of mother uneventful. Placenta imperfectly developed; demonstrated as specimen No. 1.

Case 3. Mrs. G. P. Age 17. Primipera. Attended by the San Francisco Maternity. History negative. No symptoms during pregnancy. Position L. O. A. Labor December 4th, 1904. Throughout first stage there was a moderate but persistent flow of blood. On examination at the end of the first stage I could feel the edge of the placenta lying to the right of the internal os. Membranes were ruptured and head crowded into brim by supra pubic pressure. Hemorrhage ceased and a live child, full term, delivered spontaneously forty minutes later. Placenta was adherent, but finally delivered by Crede method, maternal sur-

face first. Hemorrhage estimated about thirty ounces. Placenta was normal except for blood clot about size of three fingers adhering to lower part. Recovery of mother and child uneventful.

Case 4. Physician's wife. Age 35. Two para. Menstruation always very free, lasting one week. One spontaneous miscarriage at third month. Previous labor spontaneous and normal except the child died of hemorrhage of the brain thirty-six hours after birth. Pelvic history since this confinement has been negative. The last period was in December, 1905. There was a profuse flow in January, lasting one week, which came a week later than the expected time. In February there was a scanty flow three days after the regular time. No more blood until July 14th. In April the patient fell down hill for about twenty feet without causing any signs of her condition. In July, associated with marked constipation, there was a slight flow for which patient remained in bed two weeks, fearing a miscarriage. On August 9th the flow returned, at which time I was called to see the patient.

Examination. Fundus  $33\frac{1}{2}$  cm. above the symphysis. Foetal heart strong. L. O. P. Head floating. Pelvis Justo-Major. Perineum firm. Cervix lacerated but closed.

As both husband and wife were very desirous for a child, no diagnostic dilatation of the cervix was attempted, although both the husband and myself strongly suspected a placenta previa. Patient was put to bed and treated with sedatives. On August 15 flow returned, with slight pains. August 17 a blood clot was passed. August 19 patient went into regular labor. At nine-thirty p. m. the cervix was dilated two fingers and the placenta could be felt partially overlying the cervix. Hemorrhage became profuse and continuous, which stopped after a bipolar version had been done. After an hour of fairly good pains the cervix became sufficiently dilated for an easy and rapid extraction. The baby was stillborn, weighed four pounds and ten ounces and was about six weeks premature. The placenta was normal except for the laceration caused by the delivery. (Specimen No. 2.) No post partum hemorrhage and recovery uneventful without fever.

Case 5. Mrs. L. Age about 35. Multipera. I was called to attend the patient at the City and County Hospital in September, 1906. She had entered the hospital the night before, after having had a most severe hemorrhage, and was almost pulseless. She was treated for the shock and hemorrhage, but no attempts at delivery were made. Twelve hours later I found the patient in poor condition with the cervix almost completely dilated and the placenta partially overlying the internal os. A dead child presented by the vertex. Severe hemorrhage followed the examination, but stopped after rupture of the membranes and an internal version. A full term macerated foetus was slowly extracted. Placenta normal. (Specimen No. 3.) No post partum hemorrhage. Recovery uneventful. No history of the case was obtained.

Case 6. Mrs. D. Age 37. Two para. Consultation with Dr. Ryer. During the previous

pregnancy eleven years ago the patient was prevented from miscarrying only by the exhibition of extremely large doses of opium and prolonged rest in bed. Since that confinement she has suffered with subinvolution and relaxation of the genital organs. Menstruation is irregular and profuse. There have been no miscarriages. No trouble with the present pregnancy except feeling of weight in the pelvis and bearing down pains until October 28th (about 36 weeks). Since that date the flow recurred almost daily with a sharp hemorrhage at intervals every few days. On December 12th, when I was called to see the patient, she had just lost over a quart of blood. The child was in L. O. A. position and alive. There was a partial previa present. Patient's pulse was 130 and she was much weakened from the loss of blood. The hemorrhage had stopped of its own accord. She was removed to the Clara Barton Hospital and at nine p. m. a number 2 Voorhees bag was inserted in the cervix. At nine a. m. on the 13th the bag was expelled. The cervix was then dilated manually to four fingers, a Braxton-Hicks version done and the child extracted after about one and a half hours of poor pains. Child was stillborn, being very near full term. Placenta was irregular in shape and lacerated (Specimen No. 4), with cord overlying cervix. Mother made a slow recovery without fever.

Case 7. Mrs. A. C. Age 39. Primipera. Attended by the San Francisco Maternity. Menstrual history irregular. Periods every two to four weeks. Four spontaneous miscarriages. Syphilis denied. During the seventh month slight hemorrhages began, being repeated every few days. Applied at the dispensary January 14th. Fundus was then 27 cm. above the symphysis. Child in L. O. A. position. No foetal heart could be heard. Three days later patient went into labor. During the first stage there was considerable hemorrhage, which was controlled by packing the vagina. I saw the patient for the first time the next morning at ten a. m. Packing was removed and on examination cervix was found dilated two fingers and covered almost completely by the placenta. No. 2 Voorhees bag was introduced. This was expelled at two p. m. and the largest bag (No. 4) was inserted in the cervix, which completed the dilatation at four p. m. The membranes had ruptured spontaneously at the beginning of labor, which made the performance of version a very difficult procedure. This was accomplished and at six-thirty p. m. a macerated male infant was delivered. Placenta normal. (Specimen No. 5.) Mother made an afebrile recovery.

Conclusions. I believe that active measures should be instituted to terminate pregnancy or hasten labor as soon as a diagnosis of placenta previa is made. It requires the best of obstetrical judgment to decide just what operative measures are needed to meet the requirements of each individual case. In the early months therapeutic abortion should be performed. After the child is viable, Cæsarian section can be considered in rare cases, but as a general rule the best results will be

obtained by dilating the cervix with gauze or with a rubber bag and doing version and extraction when other means of stopping the hemorrhage fail or when the cervix is fully dilated. In the above series of reported cases there were two primipera and five multipera. Two were complete placenta previa, four partial and one lateral. Four babies were alive and three dead in utero when the patients were first seen. There was no maternal mortality, morbidity or severe laceration. The total foetal mortality was 71%.

1. The Journal A. M. A., May 20, 1905.
2. Gallant, American Medicine, Vol. III, No. 20, page 783.
3. Moran, Is Caesarian Section a Rational Method of Treatment in Placenta Previa? Journal A. M. A., Nov. 12, 1904.
4. Homes, Journal A. M. A., May 20, 1905.
5. Liboff, Roussky Vrach, St. Petersburg, Feb., 1905.

### DISCUSSION.

[The following discussion of Dr. Robertson's paper was not received in time for publication last month, with the paper.]

**Paper by Dr. John W. Robertson, Livermore:** "Mental and Nervous Effects of the Earthquake and Fire of April, 1906."

Dr. A. W. Hoisholt, Stockton: I am sorry that I got here in time to hear only a part of this interesting paper. I agree with Dr. Robertson as to the effect of the earthquake as a cause of insanity. Some of the cases which I saw were cases of alcoholism, that had been discharged from the institution and where the temptation to yield to the stimulant led to partaking the liquor to excess. There were several interesting cases of that kind. In regard to the statistics quoted, I must say, that it is difficult to ferret out anything through statistics, so dependent upon inaccuracies as the committance of insane to institutions. The committances are generally made hurriedly, the examination is superficial, and there are many instances where there is no information given by the relatives and the history is so meagre that it would not figure at all in a case outside of insanity.

In certain counties the endeavor seems to be to land patients that give trouble in the County Hospitals, in the State Asylum. I have seen three cases come from one county inside of a few days, which could have been treated there. They were all cases where there was some senility present—they were slovenly or weak from old age and they were therefore a good deal of trouble in the County Hospital and were sent to the State Hospital. If the statistics include such cases and cases of alcoholism that by the time they have arrived have recovered from their delirium tremens, then you can see that the summing up of these cases and comparing them with other years does not give a scientifically correct total and you can not depend upon the statistics.

Dr. Robertson: I had hoped that my paper would bring out many of the facts that I left unsaid. All of you were there and all experienced this nervous condition to a greater extent than I did; many peculiar mental effects developed and for that reason I omitted them and picked up the sequelae of the earthquake. I will call on Dr. Thomas of Oakland to speak of some things in this connection of which he was speaking to me today, especially with regard to the animals.

Dr. Thomas, Oakland: I think there is one thing that the doctor has mentioned, which we all ought to remember, and that is the foundation principle which is so foreign to the layman, that insanity is due to a physical condition of the brain. The public is fed by fiction. Insanity is due to a physical disease. I was talking to Dr. Robertson of the physical phenomena—even that of my own family. First there was the stupefaction, which lasted for several

hours and in some cases did not go for several days. Then the effect upon those who were sick around us. One man had had typhoid fever and had not been able to do his work. His hand was forced—he had to get to the city and attend to things. He began to improve and gain in weight and appetite. The exaltation remained for a long time, then gradually wore down and we began to notice great depression. In our commercial houses we found great trouble with the help—old standbys complaining of their assistants and trifling little things making them peevish and grumpy. With the mailing clerks and other business men this post-earthquake effect was felt; the reaction became evident. With regard to animals, I had a friend who had kennels and many dogs. He lived in the suburbs, and on the night of the earthquake he left San Francisco very late and got home during the early morning. He noticed a great restlessness; the horses were kicking and moving about, and the dogs were howling and growling and shivering. He went out to them and lashed them around, but could not stop this apparent nervousness and terror. Then the earthquake followed some time after, and, as I have heard of several other incidents of animals behaving in this manner, I think they knew more of the earthquake to follow than we did. I have heard of half a dozen such stories.

Dr. Kerr: I am sure that we have had more or less experience with the disturbance of the mental system amongst our patients. The effect was marked upon the nervous system of old people. Patients, say, 80 years of age—men who had retired from business and had taken no interest in it for three or four years—for the first time and for two or three months after the fire, were among the most active men in town. There was some peculiar stimulation. They gave good advice to the younger men on difficult propositions and there seemed to be a re-awakening among the old men. In five such cases, these men died suddenly. There seemed to be a rejuvenation of the mental faculties for the time being. Later symptoms showed that this was due to the prolonged nerve tension which shows itself in many business men. Now they are beginning to go to pieces. The case of a nurse has come under my notice, who went through the fire in a way wonderful to see. She took her patient out of town and hurried back and assisted in getting other patients out and behaved in a way that won the admiration of everyone. She came back after six weeks and went to work with the refugees. By and by she said she felt tired. She was nursing one of my patients and I noticed a listless and dopy condition. Then she would forget things and would say that she forgot. I thought she was coming down with typhoid. This went on until she forgot where she was. She would put on her hat and go out, and forget, when she got back, where she had been. After a while she went to a sanitarium, but there they could not do much with her. Afterwards she went away with a nurse to the Islands and came back better, but still her mind was a blank, and only last Saturday I received a letter from the Relief Commission asking me for further particulars about her as she was apparently a complete mental wreck. She had been perfectly well before that, there had been no history of nervous tendencies; she had never been hysterical.

Dr. Parkinson, Sacramento: In speaking of the effects of the earthquake, I think the great feature is that condition of mental exaltation which has been mentioned. The condition was comparable to the conditions of a great battle, and those of you who were in San Francisco will note the great similarity. There was the destruction of the property, the absence of civil organization and civil authority, the presence of a large body of armed men and the firing

of guns and blowing up of buildings, the hurrying of people and devastation in general. Following that came a condition in which there were all degrees of exaltation from heroic to mildly hysterical. Men and women were willing to work for hours and hours without rest, and in Sacramento it was difficult to get them to sleep. They were wild to do all they could. The difficulty was for the heads of the relief committees to get the willing workers out of the way. The effort to distribute charity became absurd. After a few days it became evident that the women were feeding the whole surrounding country. This continued until July, when there came a gradual letting down and then a development of the secondary effects as spoken of in this paper and by those who have discussed it.

Dr. Mays of Sausalito asked whether Dr. Robertson had heard of any cases of chronic paralysis having become well with the shock and excitement of the earthquake.

Dr. Robertson: Answering Dr. Mays, I will say that I knew of a few cases who suddenly got up and were able to go around. One was a neurasthenic who was so nervous before the earthquake that he could hardly do anything; another afterwards became a member of one of the big Executive Committees; another old man was a case of heart disease, but suddenly became able to get up and go around helping pack up and move out. The papers were full of these statements.

## NEW AND NON-OFFICIAL REMEDIES.

(CONTINUED FROM JULY)

### ELIXIR EUPNEIN.

A preparation said to contain in each dose of 8 Cc. (2 fluidrams): heroin 0.0026 Gm. (1/24 grain), terpin hydrate 0.13 Gm. (2 grains), creosote 0.3 Gm. (5 grains), in a menstruum containing 30 per cent. of alcohol with glycerin and aromatic essential oils.

Actions and Uses.—From its composition it appears to be well adapted to use in chronic cough from bronchitis, etc. Dosage.—4 to 12 Cc. (1 to 3 fluidrams). Prepared by Schieffelin & Co., New York.

### ELIXIR SAW PALMETTO.

An elixir of palmetto berries, sandal wood and cornsilk.

Actions and Uses.—The constituents of this preparation are credited with diuretic properties and believed to be sedative to the genitourinary tract and to exert a curative action on the inflamed mucous membrane, especially in chronic cases. Dosage.—4 to 16 Cc. (1 to 4 fluidrams) three times a day. Prepared by Parke, Davis & Co., Detroit, Mich.

### EMPYROFORM.

A condensation product of birch tar and formaldehyde.

Actions and Uses.—Empyroform is an antipuritic, sedative and desiccant. It is said to be superior to tar and free from irritant or toxic effects. It is claimed to be useful in all stages of eczema, psoriasis, lichen, urticaria, prurigo, pityriasis, etc. Dosage.—It is applied as a 5 to 10 per cent. ointment, 10 to 20 per cent. zinc paste, 10 to 20 per cent. tincture, and 37.5 per cent. suspension. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

### EPICARIN.

Epicaric,  $C_{10}H_7(OH)(COOH)(CH_2C_{10}H_6OH)$  2:3:  $1=C_{18}H_{14}O_4$ , B-naphthol-hy. Administered internally it is excreted mostly undecomposed. It has been found useful in the treatment of skin diseases, particularly scabies, tinea tonsurans, prurigo and certain forms of eczema. Dosage.—It is used externally only in the form of 5 to 20 per cent. ointment, with